

### REMARKS

Claims 1-20 are pending. The independent claims are claims 1, 7, 14, and 20. Applicant respectfully submits that these claims should be allowed.

#### Indefiniteness Rejection of Claims 5, 12, and 17

It is well known in the art that EPROM (erasable programmable read-only memory) is a special type of PROM that can be erased by exposing it to ultraviolet light. It is also well known in the art that EEPROM (electrically erasable programmable read-only memory) is a special type of PROM that can be erased by exposing it to an electrical charge. Further, it is well known in the art that PROM (programmable read-only memory) is a memory chip on which you can store a program, and that (like ROMs) PROMs are non-volatile.

As memory technology has matured in recent years, the line between RAM and ROM has blurred. Now, several types of memory combine features of both. For example, EEPROM and flash are descendants of ROM devices but have RAM features.

The Examiner is correct that ROM and RAM often used to be considered as distinct, but nowadays the line between them is no longer completely clear. However, in order to clarify claims 5, 12, and 17 these claims are now amended to say “comprises or utilizes” instead of “comprises.” Thus, the ordinary practitioner will understand that amended claims 5, 12, and 17 are not necessarily saying that EPROM or EEPROM are included within the RAM.

#### Rejections of the Independent Claims

Independent claims 1, 7, 14, and 20 are rejected as anticipated by *Huang* (U.S. Patent No. 5, 056,010). The independent claims are also rejected as anticipated by *Miura* (U.S. Patent Application No. 2002/0185337). The independent claims are now amended to more clearly distinguish the claimed invention from the cited references. The amendments clarify that the random access memory is useable for running program code substantially

simultaneously with the data being transmitted. This is supported at least by page 5 of the application, lines 33-35.

Moreover, Applicant would like to point out that, in *Huang*, reference is made to a random access memory's "buffer" 4, whereas in the present application reference is made to random access memory itself. In other words, the buses connected to *Huang*'s buffer differ from those disclosed in the present application.

According to the Office Action, *Huang*'s bus connecting the controller 3 and the block 6 is a control bus, by means of which the memory circuit is controlled. *Huang*'s bus connecting the controller 3 and the block 6 is a bus used for controlling the function of the controller, i.e., the operation of the memory circuit, as the controller controls the operation of the memory circuit. The present application discloses a bus of similar type, which is used for controlling the controller, which, in turn, controls the memory circuits. *Huang*'s solution differs from the solution of the present application in that the solution of the present application contains a normal random access memory (RAM) instead of merely a RAM's buffer, and so the controller becomes more complicated in structure when compared to *Huang*. Furthermore, this difference also affects *Huang*'s bus connecting the controller 3 to the memory 4; in the present application control signals and an address bus (full RAM bus) are also coupled thereto. Since *Huang* discloses a RAM's buffer instead of a normal RAM, *Huang*'s bus connecting the HOST with the RAM's buffer is also simpler; in other words, in the present application the bus connecting to the HOST is a full RAM bus (data, control, addresses, et cetera).

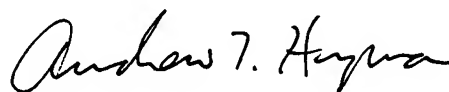
In any event, the present amendment of the independent claims clearly distinguishes the present claimed invention from both *Huang* and *Miura*. Neither of these references teaches or suggests that the random access memory is useable for running program code substantially simultaneously with the data being transmitted between non-volatile RAM and RAM via a memory controller.

CONCLUSION

Applicants respectfully submit that the amended claims 1-20 of the present application define patentable subject matter and are patentably distinguishable over the cited references for the reasons explained. The rejections of the non-final Official Action of September 16, 2004 having been shown to be inapplicable, retraction thereof is requested, and early passage of claims 1-20 to issue is earnestly solicited.

Applicant would appreciate if the Examiner would please contact Applicant's attorney by telephone, if that might help to speedily dispose of any unresolved issues pertaining to the present application.

Respectfully submitted,



Andrew T. Hyman  
Attorney for the Applicant  
Registration No. 45,858

December 16, 2004  
ATH/mbh  
WARE, FRESSOLA, VAN DER SLUYS  
& ADOLPHSON LLP  
755 Main Street, PO Box 224  
Monroe CT 06468  
(203) 261-1234